

Patent Abstracts of Japan

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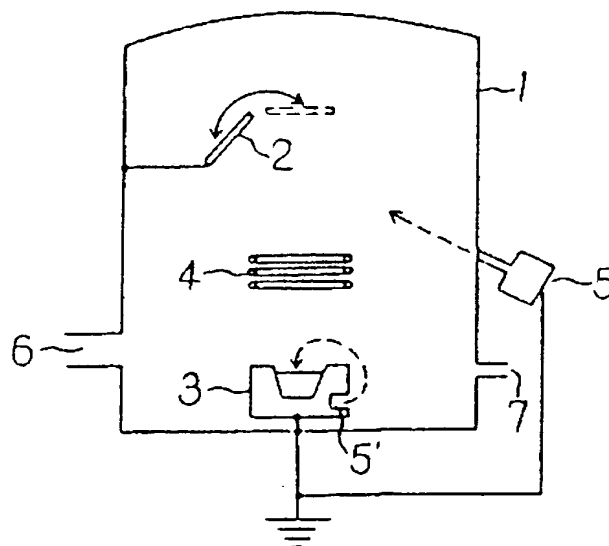
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TITLE : PHYSICAL VAPOR DEPOSITION
PRETREATMENT TO CLEAN
SURFACE OF MATERIAL FOR VAPOR
DEPOSITION



ABSTRACT : PURPOSE: To improve the adhesion between the surface of a substrate for vapor deposition and a film deposited by evaporation in the stage of depositing by evaporation a metal onto said substrate by cleaning preliminarily the surface for vapor deposition by thermion.

CONSTITUTION: A substrate for vapor deposition is attached to a substrate holder 2 in a vacuum bell-jar 1 and thermion is irradiated from an electron gun 5 to the surface of the substrate to clean the surface for vapor deposition. The holder 2 is rotated to the position shown by a dotted line to set the surface for vapor deposition of the substrate in the position parallel with the surface of a molten metal for vapor deposition in a crucible 3. While a prescribed amt. of gaseous Ar is introduced through an inlet 7 into the bell-jar, the gaseous Ar is excited to plasma by a high-frequency excitation coil 4 and the metal in the crucible 3 is melted by an electron gun 5' so that the metal in the crucible 3 is deposited by ion plating on the substrate surface. The metallic layer deposited by evaporation with high adhesion between the substrate and the film deposited by evaporation is thus obtd.

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